

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024158**Date Inspected:** 29-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Shi Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Magnetic Particle Testing (MT) – NWIT Document No's: 009295

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Segment 13AW. The weld designations reviewed are as follows:

1. SEG3013AH-163, 162, 152, 153, 142, 143, 132, 133, 122, 123, 104, 113
2. SEG3013AH-009, 010, 012, 013, 016, 017, 020, 021, 023, 176, 183
3. SEG3013M-037, 038

OBG Trial Assembly Yard

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) welding of weld joint SEG3015M-165 located on longitudinal diaphragm to bottom plate of OBG Segment 13CW. ZPMC Welder is identified as 066734. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-FCAW-3G-(3F)-ESAB-Repair, which is used as per Welding Repair Report (WRR) B-WRR-21110.

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## WELDING INSPECTION REPORT

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FCAW welding of weld joint SEG3014K-102 located on longitudinal diaphragm to bottom plate of OBG Segment 13BW. ZPMC Welder is identified as 066734. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-FCAW-3G-(3F)-ESAB-Repair, which is used as per Welding Repair Report (WRR) B-WRR-21110.

FCAW welding of weld joint SA3122-015~016-007 and 008 located on bottom plate connected SA3122 at panel point 121 to 121.5 FL2 side of OBG Segment 13BW. ZPMC Welder is identified as 045143. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

FCAW welding of weld joint SEG3014F-345 located on side plate RS stiffener to floor beam at panel point 121 to 121.5 of OBG Segment 13BW. ZPMC Welder is identified as 045240. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-ESAB.

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG3014L-80, 076, 086, 082 located on longitudinal RS stiffener to floor beam at panel point 121 of OBG Segment 13BW. ZPMC Welder is identified as 066687. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPSB-P-2114-FCM-1.

SMAW welding of weld joint SEG3014F-345 located on side plate RS stiffener to floor beam at panel point 121 to 121.5 of OBG Segment 13BW. ZPMC Welder is identified as 066156. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2213-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3015K-228 located on side plate RS stiffener to floor beam at panel point 122.5 of OBG Segment 13CW. ZPMC Welder is identified as 067947. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2213-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3015V-015, 016, 017, 018 located on side plate RS stiffener to floor beam at panel point 122.5 to 123 of OBG Segment 13BW. ZPMC Welder is identified as 067947. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2113-FCM-1.

SMAW welding of weld joint SEG3015U-004 located on vertical plate to edge plate at panel point 122.5 to 123 of OBG Segment 13CW. ZPMC Welder is identified as 068596. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-B-U2-FCM-1.

This QA inspector observed ABF personnel performed Ultrasonic Testing (UT) repair welding area on deck panel to deck panel splice joint of OBG Segment 13AW. The weld number is identified as SEG3013-011 and 012. See the attached picture.

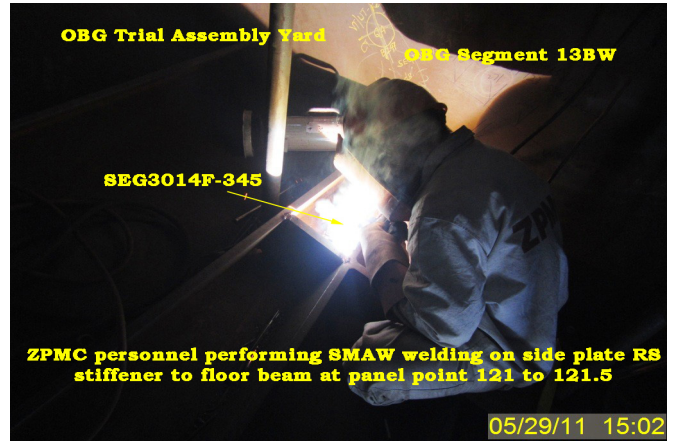
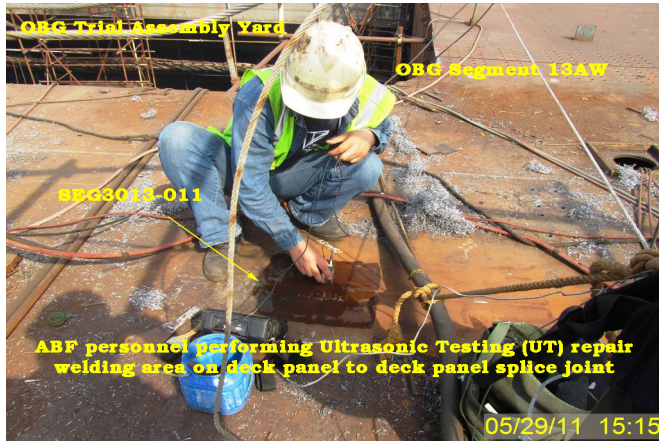
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## WELDING INSPECTION REPORT

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Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar,Vibin

Quality Assurance Inspector

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**Reviewed By:** Patel,Hiranch

QA Reviewer